



Immunize Utah

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Utah Department of Health Immunization Program

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Perinatal Hepatitis B in Utah

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Utah Immunization Program

Hepatitis B virus infection (HBV) is a major public health problem in the United States and the world. There are approximately 300,000 new cases in the United States each year, one third of which are acquired through perinatal or early childhood transmission.

Over 95 percent of otherwise healthy adults and older children who acquire HBV recover from the infection and suffer no long-lasting effects. In contrast, as many as 90 percent of infants who acquire HBV infection from their mothers at birth become chronically infected. Of children who become infected with HBV between one and five years of age, 30 to 50 percent become chronically infected.

The Utah Perinatal Prevention Program works to prevent the spread of hepatitis B from infected pregnant women to their children and household contacts. This goal is accomplished through education, screening, immunization, and follow-up.

Case managers in each Utah health district follow identified women through their pregnancy, birth of their infant and through the infant's first birthday. They provide education for the families and ensure that the infant receives the proper immunizations and post-vaccination testing. They also work to ensure that any susceptible household members are adequately immunized. Utah case managers handle approximately 100 cases per year statewide. Due to the lengthy process, case managers usually juggle three years of cases at one time.

Utah Communicable Disease Rule (R-386-702) requires that every pregnant woman be tested for hepatitis B surface antigen (HBsAg) as part of routine prenatal screening during each pregnancy. Positive results must be reported to the state or local health department. Screening for HBsAg allows for identification of infected pregnant women, prevention of HBV infection in the infant, and treatment of the infected mother. It also enables family members who are at risk to be immunized.

Administration of hepatitis B immune globulin (HBIG) and hepatitis B vaccine within 12 hours of birth to all infants born to HBsAg positive women is 90 to 95 percent effective in preventing HBV infection. The second and third doses of hepatitis B vaccine should also be administered at one and six months of age. It is critical that infants born to HBsAg positive mothers receive their immunizations according to this schedule. Post-vaccination serology should be completed three to nine months after the final dose of vaccine to evaluate proper antibody development in the infant.



Utah has made many strides in the past few years to improve the Utah Perinatal Prevention Program. The enactment of the screening and reporting requirement has helped to improve identification of HBsAg positive women. Additionally, diligent follow-up by case managers has contributed to greater success. More effort has been made to coordinate with prenatal providers, pediatric providers, hospitals, and labs. These efforts have resulted in Utah receiving two awards from the Centers for Disease Control and Prevention for continued improvement.

Hepatitis B is a very serious disease. However, it can be prevented with continued efforts to identify infected pregnant women and immunize their infants and household members. Continued collaborative efforts will make the difference.

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Interim Recommendations for the Use of *Haemophilus influenzae* Type b (Hib) Conjugate Vaccines and Comvax®)

On December 13, 2007, Merck & Co., Inc. (West Point, Pennsylvania) announced a voluntary recall of certain lots of two *Haemophilus influenzae* type b (Hib) conjugate vaccines, PedvaxHIB® (monovalent Hib vaccine) and Comvax® (Hib/hepatitis B vaccine). Providers should return unused vaccine from these recalled lots using procedures outlined on the Merck website at <http://www.merckvaccines.com/PCHRecall.pdf>. Additional information regarding the affected lots is available online from the Food and Drug Administration (FDA) at <http://www.fda.gov/consumer/updates/hib121307.html>. Merck has suspended production of its Hib conjugate vaccines and does not expect to resume distribution of these vaccines until the fourth quarter of 2008. The recall of PedvaxHIB and Comvax and suspension of production are expected to result in short-term disruption to the Hib vaccine supply in the United States.

Merck issued this voluntary recall as a precautionary measure because the company cannot assure the sterility of equipment used during manufacture of these lots. However, the potency of the vaccine in the recalled lots was not affected, and Merck reported that no contamination of vaccine has been detected. Therefore, children who received Hib conjugate vaccine from the recalled lots do not need revaccination or any special follow-up.

The recommended vaccination schedule for all available Hib-containing vaccines consists of a primary series (consisting of two or three doses, depending on the formulation) administered beginning at age two months and a booster dose at age 12-15 months. Because of the short-term reduction in available doses of Hib-containing vaccines, the Centers for Disease Control and Prevention (CDC), in consultation with the Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians, and the American Academy of Pediatrics, recommends that providers temporarily defer administering the routine Hib vaccine booster dose administered at age 12-15 months, except to children in specific groups at high risk, who are described in this report. Providers should register and track children for whom the booster dose is deferred to facilitate recalling them for vaccination when supply improves.

The vaccines affected by the recall, PedvaxHIB and Comvax, contain Hib capsular polysaccharide (i.e., polyribosylribitol phosphate [PRP]) covalently linked to a meningococcal outer membrane protein (OMP) carrier. The two unaffected vaccines, ActHIB and TriHIBit, are PRP-tetanus toxoid (PRP-TT) conjugate Hib vaccines. PedvaxHIB and Comvax are recommended as a two-

dose primary series (at ages two and four months), whereas ActHIB is recommended as a three-dose primary series (at ages two, four, and six months). ActHIB and PedvaxHIB also are licensed for the 12-15 month booster dose. TriHIBit is licensed only for the 12-15 month booster dose. Children who are not at increased risk for Hib disease, as described in this report, and who received PRP-OMP vaccines for only the first or second dose of their routine primary series, may be administered PRP-TT to complete the primary series. In these children, a total of three doses will complete the primary series. Children who are behind schedule should complete the primary series according to age-appropriate recommendations.

Certain children are at increased risk for Hib disease, including children with asplenia, sickle cell disease, human immunodeficiency virus infection and certain other immunodeficiency syndromes, and malignant neoplasms. CDC recommends that providers continue to vaccinate these children with available Hib conjugate vaccines according to the routinely recommended schedules, including the 12-15 month booster dose. PedvaxHIB (if available), ActHIB, and TriHIBit may be used for the booster doses for these children during this shortage. Hib vaccines also are recommended for use in prophylaxis for susceptible close contacts of patients with Hib disease. CDC recommends that providers continue to vaccinate close contacts according to published guidelines.

American Indian/Alaska Native (AI/AN) children also are at increased risk for Hib disease, particularly in the first six months of life. For these reasons, CDC recommends that providers who currently use PRP-OMP-containing Hib vaccines (PedvaxHIB and Comvax) to serve predominantly AI/AN children in AI/AN communities continue to stock and use only PRP-OMP-containing Hib vaccines not affected by the recall and vaccinate according to the routinely recommended schedules, including the 12-15 month booster dose. In its vaccine stockpile, CDC has PRP-OMP-containing Hib vaccines not affected by the recall and will prioritize distribution of available PRP-OMP vaccines for use in AI/AN communities. AI/AN children not in AI/AN communities or who already receive PRP-TT conjugate vaccines should continue to be vaccinated with available vaccines according to the routinely recommended schedules, including the 12-15 month booster dose.

Source: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5650a4.htm>

Everything You Always Wanted to Know about VAERS

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The Vaccine Adverse Event Reporting System (VAERS) is a national vaccine safety surveillance program co-sponsored by the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA). VAERS collects and analyzes information from reports of adverse events following immunization that may possibly be related to the vaccine or vaccines administered.

Since beginning in 1990, VAERS has received more than 123,000 reports. Most reports describe mild side effects like fever. Very rarely, people experience serious adverse events following immunization. By monitoring such events, VAERS may help to identify any important new safety concerns and help to ensure that the benefits of vaccines continue to be far greater than the risks.

VAERS encourages reporting of any clinically significant adverse event that occurs after the administration of any vaccine licensed in the United States, even if is not certain that the vaccine caused the event.

Anyone can report to VAERS. Public health departments, private health care providers, and vaccine recipients usually submit reports to VAERS. Vaccine recipients or their parents/guardians are encouraged to seek help from their health care provider when reporting to VAERS.

Why should you as a health care provider report adverse events to VAERS? Rotavirus vaccine is a perfect example. When reports of intussusception were sent to VAERS, an expedited review of data was completed. A large multi-state investigation was conducted. Data indicated a strong association between rotavirus vaccine and intussusception. The RotoShield vaccine was subsequently withdrawn from use. VAERS data indicated a possible problem, which led to a more definitive study, and to public health action.

Reports can be mailed, faxed, or submitted online to VAERS. Complete reporting information and forms can be obtained from the VAERS website:

www.vaers.hhs.gov. Utah public health providers should submit a copy of any reports to the Utah Department of Health, Immunization Program, P.O. Box 142001, Salt Lake City, Utah 84114-2001.

All vaccine providers can contribute to the success of

this system by reporting any adverse event that might be related to vaccination in children and adults. This system works because you make it work.

New International Certificate for Yellow Fever Vaccine

In response to the 2005 revision of the International Health Regulations (IHR 2005), as of December 15, 2007, a new International Certificate of Vaccination or Prophylaxis (ICVP) has replaced the old certificates. The new certificate provides space for potential certification of additional types of vaccination or prophylaxis to protect against newly emerging or reemerging diseases or other events of public health importance. However, the only vaccination currently required to be indicated on the ICVP is for yellow fever.

Yellow fever vaccine is required under IHR 2005 by certain countries for entry, and the new ICVP is required for any yellow fever vaccination administered beginning December 15, 2007. Persons vaccinated before that date may use the old certificate until it expires 10 years from the date of vaccination.

The new certificates are available to health-care providers through the U.S. Government Printing Office (GPO). The new ICVPs are available for order from GPO online at <http://bookstore.gpo.gov/collections/vaccination.jsp>, or by telephone (866-512-1800). Additional information regarding the new requirement is available from the CDC Travelers' Health Team by telephone (404-639-4500) or online via the Travelers' Health website at <http://wwwn.cdc.gov/travel/content/intcertofvaccination.aspx>.

Utah Statewide Immunization Information System

December 2007 USIIS Update

In December the USIIS team released a major update to USIIS. This release represented the culmination of a multi-year project to improve the record matching capability of USIIS.

Early measures indicate that the new software will dramatically reduce the number of duplicate records and increase the incidence of matched records.

January 2008 Immunization Forecast Update

A major Immunization Forecast update will be released in January.

Many changes and corrections have been made to immunization schedules, series, intervals, grace periods, contraindications, etc.

Look for a USIIS web application pop-up box containing a message announcing this update.

For details about the changes, access the release link from the pop-up box.

Schools Enrolled in USIIS

The Provider Outreach team completed a focused campaign in 2007, enrolling the following numbers of schools:

Public schools: 75
Private schools: 9
School districts: 17

Highlights from the 2007 USIIS Customer Satisfaction Survey

Frequency of use:

77% of enrolled providers access USIIS daily or weekly.

Methods of use:

66% of enrolled providers access the USIIS Web application.
22% of providers download data to USIIS from their electronic medical records systems.

Percent of users "satisfied" or "very satisfied" with the following features:

Patient search: 92%
Immunization data entry: 94%
Immunization forecast: 89%
Customer support: 96%

USIIS User Tip

To more reliably locate patient records in the USIIS Web application:

1. Enter **only** the patient's First Name, Last Name and Date of Birth.
 - Entering additional patient information reduces the likelihood of finding a patient.
 - Use additional patient information, if necessary, to select the correct patient from the resulting list of patients.
2. Also, ensure that names are spelled correctly and that the birth date is accurate.

For more information about USIIS, contact Janel Jorgenson at 801-538-9991.

Revised Immunization Materials

The "Got Vaxed," "Vaccinate Before You Graduate," "Parents' Guide" and the "USIIS Desktop Reference" have recently been updated.

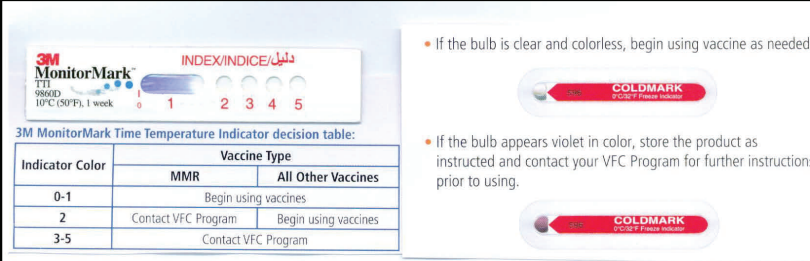
To order literature or promotional materials, visit http://www.immunize-utah.org/provider/professional_edmat.htm and click on public or private provider.

Vaccine Management Tips

10 Tips for Receiving Vaccine Shipments from McKesson Specialty Distribution

- 1) **Identify the shipment as a VFC or private order.**
Locate the enclosed Packing List. VFC shipments from McKesson are identified with a paragraph at the lower portion of the page which states, “*This vaccine was purchased with public (state/local and/or federal) funds, and may be administered only to patients eligible to receive publicly-funded vaccine.*”
- 2) **Locate the 3M Monitor Mark (warm mark) and COLDMARK (freeze indicator).** To ensure normal temperature ranges were maintained during shipping, examine each monitor for activation. (See monitors and instructions below.)
- 3) If either monitor has activated to **inappropriate measures**, mark the vaccines “**Do NOT Use**” and store the vaccines in the refrigerator. Contact the Utah VFC Program at 801-538-9450.
- 4) **Remove the vaccines from the plastic zippered storage bags** (used by McKesson) before storing them in the refrigerator. Plastic bags are not approved-or appropriate-for storage of vaccines.
- 5) **Verify the vaccines, quantities, lot numbers and expiration dates with the packing slip.** Contact the Utah VFC Program with any discrepancies.
- 6) **Mark or label each vaccine package VFC** and store in the refrigerator in the middle of the compartment. An open-weave/slotted basket or a tray, which allows for air flow around the vaccines, may be used.
- 7) **Do not remove the vaccine vials from the manufacturer original packaging** (boxes) or store them in bins, baggies, or sealed containers. Vaccine viability and efficacy has not been tested in vials stored in this manner. Exposure to light may affect potency in some vaccines. Administration errors could occur, as vials look similar.
- 8) **Rotate stock** to show earliest expiration dates are stored in front. Note about-to-expire vaccines and contact the Utah VFC Program for assistance.
- 9) **Sign, date, and fax the packing slip to the Utah VFC Program** at 801-538-9322 or 801-538-9440.
- 10) **Train all clinic staff in these procedures.** Make sure VFC and private vaccine orders are received and stored separately and appropriately. Notify the clinic's vaccine coordinator of VFC orders received in their absence, and forward the packing lists to them.

Temperature Monitors: Upon receiving the shipment, take a moment to locate and check monitors for activation to ensure the cold chain was maintained during shipping.



The image shows two types of vaccine monitors: the 3M MonitorMark and the COLDMARK. The 3M MonitorMark is a small device with a bulb and a scale from 0 to 5. The COLDMARK is a small device with a bulb and a scale from 0 to 5. Below the monitors is a table titled "3M MonitorMark Time Temperature Indicator decision table:".

Indicator Color	Vaccine Type	
	MMR	All Other Vaccines
0-1	Begin using vaccines	
2	Contact VFC Program	Begin using vaccines
3-5	Contact VFC Program	

Instructions for the monitors:

- If the bulb is clear and colorless, begin using vaccine as needed.
- If the bulb appears violet in color, store the product as instructed and contact your VFC Program for further instructions prior to using.

VFC Providers: Don't forget. . .

A current VFC vaccine inventory must be submitted with every vaccine order. Make sure that you are using the current Vaccine Order Form, dated 08/07, indicated in the bottom right-hand corner. For a current copy, contact the Utah VFC Program at 801-538-9450, e-mail a request to lindajenkins@utah.gov, or visit http://www.immunize-utah.org/provider/vfc/printable_forms.htm.

MMR Vaccine Does Not Cause Autism-Examine the Evidence!

In February 1998, *The Lancet* published an article titled "Ileal-Lymphoid-Nodular Hyperplasia, Non-Specific Colitis, and Pervasive Developmental Disorder in Children," which suggested that MMR vaccine could contribute to the development of autism. Intense media coverage of the article followed its publication, and many parents, particularly in the UK, refused MMR vaccination of their children.

In 2004, the *Lancet* published a retraction submitted by 10 of the 13 original authors. The authors stated that there was no connection between the MMR vaccine and the bowel disease/autism syndrome.

A decade later, the number of articles published in peer-reviewed medical journals that refute a connection between MMR vaccine and autism totals more than 20; whereas the number of articles that suggest a connection between the vaccine and autism stands at three.

The following list of studies published in peer-reviewed journals is provided so that parents and practitioners can compare the balance of evidence about MMR and autism.

23 studies that refute a connection between MMR vaccine and the development of autism

1. *MMR-Vaccine and Regression in Autism Spectrum Disorders: Negative Results Presented from Japan.* Uchiyama T et al. *J Autism Dev Disord* 2007; 37(2):210-7 *Subjects: 904 children with autism spectrum disorder (Note: MMR was used in Japan only between 1989 and 1993.)
2. *No Evidence of Persisting Measles Virus in Peripheral Blood Mononuclear Cells from Children with Autism Spectrum Disorder.* D'Souza Y et al. *Pediatrics* 2006; 118 (4): 1664-75 *Subjects: 54 children with autism spectrum disorder and 34 developmentally normal children
3. *Immunizations and Autism: A Review of the Literature.* Doja A, Roberts W. *Can J Neurol Sci.* 2006; 33(4):341-6 *Literature review
4. *Pervasive Developmental Disorders in Montreal, Quebec, Canada: Prevalence and Links with Immunizations.* Fombonne E et al. *Pediatrics.* 2006;118(1):139-50 *Subjects: 27,749 children born from 1987 to 1998 attending 55 schools
5. *Relationship between MMR Vaccine and Autism.* Klein KC, Diehl EB. *Ann Pharmacother.* 2004; 38(7-8):1297-300 *Literature review of 10 studies
6. *Immunization Safety Review: Vaccines and Autism.* Institute of Medicine. The National Academies Press: 2004 (www.nap.edu/books/030909237X/html) *Literature review
7. *MMR Vaccination and Pervasive Developmental Disorders: A Case-Control Study.* Smeeth L et al. *Lancet* 2004; Vol. 364(9438):963-9 *Subjects: 1294 cases and 4469 controls
8. *Age at First Measles-Mumps-Rubella Vaccination in Children with Autism and School-Matched Control Subjects: A Population-Based Study in Metropolitan Atlanta.* DeStefano F et al. *Pediatrics* 2004; Vol. 113(2):259-66 *Subjects: 624 children with autism and 1,824 controls
9. *Prevalence of Autism and Parentally Reported Triggers in a North East London Population.* Lingam R et al. *Arch Dis Child* 2003; 88(8):666-70 *Subjects: 567 children with autistic spectrum disorder
10. *Neurologic Disorders after Measles-Mumps-Rubella Vaccination.* Makela A et al. *Pediatrics* 2002; 110:957-63 *Subjects: 535,544 children vaccinated between November 1982 and June 1986 in Finland
11. *A Population-Based Study of Measles, Mumps, and Rubella Vaccination and Autism.* Madsen KM et al. *N Engl J Med* 2002; 347(19):1477-82 *Subjects: All 537,303 children born 1/91-12/98 in Denmark
12. *Relation of Childhood Gastrointestinal Disorders to Autism: Nested Case Control Study Using Data from the UK General Practice Research Database.* Black C et al. *BMJ* 2002; 325:419-21 *Subjects: 96 children diagnosed with autism and 449 controls

Continued on next page

13. *Measles, Mumps, and Rubella Vaccination and Bowel Problems or Developmental Regression in Children with Autism: Population Study.* Taylor B et al. BMJ 2002; 324 (7334):393-6 *Subjects: 278 children with core autism and 195 with atypical autism
 14. *No Evidence for a New Variant of Measles-Mumps-Rubella-Induced Autism.* Fombonne E et al. Pediatrics 2001;108(4):E58 *Subjects: 262 autistic children (pre- and post-MMR samples)
 15. *Measles-Mumps-Rubella and Other Measles-Containing Vaccines Do Not Increase the Risk for Inflammatory Bowel Disease: A Case-Control Study from the Vaccine Safety Datalink Project.* Davis RL et al. Arch Pediatr Adolesc Med 2001;155(3):354-9 *Subjects: 155 persons with IBD with up to 5 controls each
 16. *Time Trends in Autism and in MMR Immunization Coverage in California.* Dales L et al. JAMA 2001; 285(9):1183-5 *Subjects: Children born in 1980-94 who were enrolled in California kindergartens (survey samples of 600-1,900 children each year)
 17. *Mumps, Measles, and Rubella Vaccine and the Incidence of Autism Recorded by General Practitioners: A Time Trend Analysis.* Kaye JA et al. BMJ 2001; 322:460-63 *Subjects: 305 children with autism
 18. *Further Evidence of the Absence of Measles Virus Genome Sequence in Full Thickness Intestinal Specimens from Patients with Crohn's Disease.* Afzal MA, et al. J Med Virol 2000; 62(3):377-82 *Subjects: Specimens from patients with Crohn's disease
 19. *Autism and Measles, Mumps, and Rubella Vaccine: No Epidemiological Evidence for a Causal Association.* Taylor B et al. Lancet 1999;353 (9169):2026-9 *Subjects: 498 children with autism
 20. *Absence of Detectable Measles Virus Genome Sequence in Inflammatory Bowel Disease Tissues and Peripheral Blood Lymphocytes.* Afzal MA et al. J Med Virol 1998; 55(3):243-9 *Subjects: 93 colonoscopic biopsies and 31 peripheral blood lymphocyte preparations
 21. *No Evidence for Measles, Mumps, and Rubella Vaccine-Associated Inflammatory Bowel Disease or Autism in a 14-year Prospective Study.* Peltola H et al. Lancet 1998; 351:1327-8 *Subjects: 3,000,000 doses of MMR vaccine
 22. *Exposure to Measles in Utero and Crohn's Disease: Danish Register Study.* Nielsen LL et al. BMJ 1998; 316 (7126) 196-7 *Subjects: 472 women with measles
 23. *Immunocytochemical Evidence of Listeria, Escherichia coli, and Streptococcus Antigens in Crohn's Disease.* Liu Y et al. Gastroenterology 1995; 108(5):1396-1404 *Subjects: Intestines and mesenteric lymph node specimens from 21 persons from families with a high frequency of Crohn's disease
 24. *Continuing Increases in Autism Reported to California's Developmental System.* Schechter R et al. Arch Gen Psychiatry, 2008; 65(1): 19-24. *Subjects: Children with autism who were active clients of the California Department of Developmental Services January 1, 1995 through March 31, 2007
- ### 3 studies that suggested a connection between MMR vaccine and the development of autism
1. *Potential Viral Pathogenic Mechanism for a New Variant Inflammatory Bowel Disease.* Uhlmann V et al. Mol Pathol 2002; 55(2):84-90 *Subjects: 91 patients with a confirmed diagnosis of ileal lymphonodular hyperplasia and enterocolitis and 70 controls
♦ Read about limitations of this study: www.cdc.gov/od/science/iso/concerns/mmr_autism_faqs.htm
 2. *Ileal-Lymphoid-Nodular Hyperplasia, Non-Specific Colitis, and Pervasive Developmental Disorder in Children.* Wakefield AJ et al. Lancet 1998;351(9103):637-41 *Subjects: 12 children with chronic enterocolitis and regressive developmental disorder
♦ Read about limitations of this study: www.immunize.org/catg.d/p2065.pdf
♦ "A Statement by the Editors of the Lancet," 2/23/04, regarding this paper and an undisclosed potential conflict of interest: <http://image.thelancet.com/extras/statement20Feb2004web.pdf>
♦ "Retraction of an Interpretation," The Lancet, March 6, 2004. Go to www.thelancet.com and register (no charge) to access this article.
 3. *Evidence of Persistent Measles Virus Infection in Crohn's Disease.* Wakefield AJ et al. J Med Virol 1993; 39(4): 345-53 *Subjects: Electron microscopy specimens from Crohn's disease and control patients
♦ The validity of this finding has been called into question when it could not be reproduced by other researchers (Nielsen et al., Jones et al., Feeney et al., Hermon-Taylor, Liu et al., Haga, Iizuka, Afzal).
- Source: www.immunize.org/catg.d/p4026.pdf, Item #P4026 (8/07)

Influenza Vaccine — Issues Related to Production, Distribution, and Public Health Messages

Why GAO Did This Study

The Government Accountability Office (GAO) recently completed a report on influenza vaccine. Annual vaccination is the main method for preventing seasonal influenza, which typically occurs in the United States from late fall to early spring. Manufacturers produce vaccine through a lengthy and complex process. Manufacturers and medical supply distributors then ship vaccine to providers such as physicians. Each year, the Department of Health and Human Services' (HHS) Centers for Disease Control and Prevention (CDC) recommends who should be targeted for vaccination, including those at higher risk for influenza-related complications or medical care—for example, adults aged 50 years and older, young children, and some individuals with chronic medical conditions. CDC bases its recommendations on those made by the agency's Advisory Committee on Immunization Practices (ACIP).

GAO examined: (1) factors that affect the quantity of vaccine produced and when it reaches providers, (2) issues related to making vaccine available to high-risk and other target groups, and (3) public health messages produced and disseminated by CDC and others to promote vaccination.

GAO reviewed relevant documents and interviewed officials from CDC, other public health entities, manufacturers, and medical supply distributors, and examined data on vaccine doses produced and shipped.

What GAO Found

Several factors affect the quantity of vaccine produced for a given influenza season and when it reaches providers who administer the vaccine. One factor is the difficulty of manufacturing a new vaccine each year, which includes adherence to a relatively inflexible and sequential process, challenges of growing new virus strains, and maintaining safety and quality control practices to produce a sterile vaccine. Other factors include limitations in the production capacity of manufacturers and demand for vaccine throughout the influenza season. In addition, the distribution route the vaccine takes from the manufacturer to the provider can also affect how much time elapses before the vaccine reaches individual providers.

Issues related to making vaccine available to high-risk and other target groups recommended by CDC and ACIP include the locations in which these individuals receive vaccinations, how vaccine is distributed to providers, and the timing of vaccine distribution to different types of providers. According to data from CDC, individuals in high-risk and other target groups have received influenza vaccinations at various locations where different types of providers administer the vaccine, including physicians' offices, workplaces, clinics, or other settings. Certain types of providers, such as physicians, reported that they received their vaccine orders after other types of providers, such as mass immunizers that provide vaccinations at retail stores. Available data for the 2006–07 influenza season indicated, however, that most types of providers received vaccine in similar time frames. CDC officials acknowledged that individual providers' experiences at the local level could vary. In an effort to help state and local health officials manage the availabil-

ity of vaccine for high-risk or other target groups, CDC and state health officials have undertaken several efforts, including the creation of monitoring tools and the implementation of a state-specific vaccine distribution program.

CDC and others have produced and disseminated public health messages—such as press releases and public service announcements—designed to promote seasonal influenza vaccination. These include messages designed to maintain public demand for vaccination later in the influenza season and to encourage preferential vaccination of certain groups during times of vaccine shortage or delay. CDC has taken steps to assess its influenza-related public health messages before disseminating them to the public and has conducted limited data collection afterwards. Although no comprehensive evaluations have been conducted to assess the impact of influenza-related messages after dissemination, CDC and other officials GAO interviewed identified key elements, such as clear and consistent messages, that they believe are important to producing effective public health messages. However, there are impediments to effectively implementing these elements, such as the need to modify messages during the season as circumstances change.

A draft of this report was provided to HHS for comment. The HHS provided technical comments, which were incorporated as appropriate.

To read the complete report, visit www.gao.gov/cgi-bin/getrpt?GAO-08-27.



Upcoming Events 2008

42nd National Immunization Conference

Dates: March 17-20, 2008

Location: Hilton Atlanta in Atlanta, Georgia

Website: www.cdc.gov/vaccines/events/nic/

Contact information: Call 404-639-8225, or email NIPNIC@cdc.gov

National Conference on Immunization & Health Coalitions

Dates: May 21-23, 2008

Location: San Francisco, Marriott Hotel, San Francisco, CA

Contact information: For more information, visit <http://www.sfimmunize.org/page2.html>.

NOTICE: Because of escalating costs and limited availability of the CDC broadcast facility, the satellite broadcast series "**Epidemiology and Prevention of Vaccine-Preventable Diseases**" will no longer be presented as a live broadcast. Beginning in 2008, this training program will be available only on DVD and Internet. The 2008 series is expected to be available in late spring.

Coalition Meetings

Northern Utah Immunization Coalition

Dates: February 5, March 4, April 1, 2008

Weber County Health Department

477 23rd Street, Ogden, 2:00 p.m.

Call Vener DeFriez at 801-451-3392 for more information.

Every Child By Two Immunization Coalition

Date: April 10, 2008

Utah Department of Health, Room 114

Salt Lake City, 10:00 a.m.

Call 801-538-9450 for more information.

Greater Salt Lake Immunization Coalition

meets the second Wednesday of every month at 2001 South State Street, Suite S3800, Conference Room, Salt Lake City. Call Sally Dawson at 801-662-1621 for more information.

Southwest Immunization Coalition for Children

meets the second Tuesday every other month at the Southwest Utah Public Health Department, 620 South 400 East, St. George, 8:00 a.m. Call Pat Thomas at 435-673-3528 for more information.

Utah Adult Immunization Coalition

meets the fourth Wednesday of every month at Health-Insight. 8:00 a.m. Call 801-538-9450 for more information.

Utah County Immunization Coalition

meets the second Tuesday every other month at the Health and Justice Building, Room 2800, 151 South University Avenue, Provo. Call Pauline Hartvigsen at 801-851-7027 for more information.

USIIS User Group Meetings

Bear River

Date: March 12, 2008 12:45 p.m.

Logan Regional Medical Center

Northern Utah

Date: April 10, 2008 12:00 p.m.

Ogden Regional Medical Center

For more information regarding User Group meetings or to establish a User Group in your area, please contact Janel Jorgenson at 801-538-9991.



Utah Department of Health

IMMUNIZATION PROGRAM

Immunize for healthy lives

P.O. Box 142001
288 North 1460 West
Salt Lake City, UT 84114-2001

Return Service Requested



Check out our websites!

www.immunize-utah.org
www.usiis.org

Welcome New VFC Providers!

Heber Valley Clinic
IHC Hillcrest Pediatrics
IHC Sunset
Kaysville Family Medicine
Midtown CHC-Davis County Medical Clinic
Ogden Clinic Mountain View
South Summit Pediatrics